Influences of Socio-Political Measures Generated by Covid-19 in Pregnant Women with A Diagnosis of Iron Deficiency Anemia

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Summary

Introduction: Iron deficiency anemia is a frequent morbidity that coincides with pregnancy in Clinic-32 of La Maya, therefore the scientific question was raised: How did the sociopolitical measures generated by covid-19 influence the diagnosis of Anemia? Iron deficiency in a pregnant woman from Clinic-32 belonging to the Carlos Finlay Polyclinic; Objective: To describe how the sociopolitical measures generated by covid-19 influenced the diagnosis of iron deficiency anemia in pregnant women at Clinic-32.

Method: It is a descriptive study. The Universe and sample was made up of 21 pregnant women with a diagnosis of iron deficiency anemia. Methods: observation, interview and review of clinical-obstetric records; using a mixed methodology. The data was triangulated using the hermeneutic paradigm.

Results: Of the pregnant women studied, the group between 20 and 34 years (85.7%) predominated, 57.1% of the patients had light anemia, 52.4% finished high school, 85.4% have regular access to medical services and the 90.5% present regular socioeconomic conditions.

Conclusions: It is evident to systematize the object of study, to carry out community interventions in women of childbearing age to prevent anemia in pregnancy; prepare a manual that guides professionals in the management of pregnant women in times of pandemic.

Keywords: COVID-19; Iron deficiency anemia; Pregnant women; Red blood cells; heterogeneity

Introduction

Anemia is one of the most alarming morbidities, and is identified as a global health problem and is quite common in pregnant women. Iron deficiency is the main cause of this nosological entity during pregnancy and is associated with serious maternal and fetal complications. The World Health Organization (WHO) estimates that 56.4 million pregnant women suffer from iron deficiency anemia [1-4], with Africa and Southeast Asia being the territories with the highest prevalence. In Latin America during the years 2016 to 2018, the prevalence of this pathology in pregnant women was 29.5%. Approximately one third of the world population has some degree of anemia, 35% of women of reproductive age, 41% of pregnant women and 18% of men are anemic [5]. According to WHO reports, it is estimated that about 35 to 75% of pregnant women in developing countries have this nosological entity. The prevalence rate of anemia during the first trimester in Cuba (2019) reached 9.7% of pregnant women. However, this prevalence may depend on the province that the pregnant woman belongs to. While in the Santiago de Cuba province it is 21.6%, in Pinar del Río, Artemisa, Mayabeque, Matanzas and Ciego de Ávila the rate is between 10–20%. Only the provinces of Havana, Sancti Spíritus, Cienfuegos, Camagüey, Las Tunas and Guantánamo have a prevalence of less than 5%. The situation worsens during the third trimester of pregnancy [6]. where the prevalence of anemia in Cuba rises to 21.4%.

Anemia is defined as a condition in which there is a deficient number of red blood cells and, consequently, an alteration in the transport of oxygen. This makes it impossible for the living being to fulfill its vital functions [7-15] and the vulnerable populations are infants and pregnant women. The WHO as hemoglobin less than 11g/dl defines anemia in pregnancy at any time. The pregnant woman is that woman who is going through a period of reproduction, the time from the fertilization of the ovule by the spermatozoon, until childbirth; During this period, it happens that a new being forms and develops in the uterine cavity, the gestation of the new being has an average duration of 280 days, 40 weeks, 10 lunar months or 9 months and 10 days of the solar calendar, which is It counts from the 1st day of the last menstruation [16-19].

Patients [20-34] who: have two very close pregnancies, a multiple pregnancy, frequent vomiting due to morning sickness, do not consume enough iron-rich foods, have a heavy menstrual flow before pregnancy, or a history of anemia, are at greater risk of developing anemia during pregnancy. Of anemia and epidemics. In general, the early symptoms of anemia are mild or nonspecific (tiredness, weakness, dizziness, mild dyspnea on exercise).In the last 5 years, the cases of iron deficiency anemia in Cuba have increased; worsening more during the covid-19 period, and the measures applied to control and/or eradicate the pandemic may have an impact on this morbidity. The scourge of COVID-19 arrived in Cuba on March 11, 2020, bringing with it regulations and sociopolitical restrictions; which played an important role in the incidence of iron deficiency anemia in pregnant women. COVID-19 is an infectious disease caused by the SARS-CoV-2 virus, which is transmitted by respiratory route or person-to-person contact [35-38]. It produces symptoms similar to those of the flu or a common cold. The seriousness of its transmission worldwide has turned it into a pandemic with great socioeconomic impacts and on the health of the population.

The advent of COVID-19 in Cuba brought with it measures for its control and elimination, which could influence the incidence of Iron Deficiency Anemia in pregnant women [39]. On March 13, 2020, the WHO issued a series of preventive measures in the face of the COVID-19 pandemic; among other recommendations, they suggested that people adopt social distancing. According to international health authorities, social distancing refers to the physical space between people to prevent the spread of disease.

Some examples of social distancing include; a) maintain a distance of at least two meters between people, b) suspend academic activities, c) close businesses, d) work from home, e) maintain social isolation, f) remain in quarantine, g) interrupt mass gatherings, and h) maintain communication with loved ones through electronic devices. Social distancing has been shown to help decrease the chances of contracting diseases, and prevent health systems from collapsing. Since the outbreak of the COVID-19 pandemic, many of the usual social and health services [40] have had to adapt in order to achieve safety and avoid contagion, an issue that has become a top priority for vulnerable groups. The pregnant woman has been considered as such and thus, specific guides have been prepared on care during pregnancy, childbirth and the postpartum period. Most of the guidelines and protocols are focused on the management of suspected or confirmed cases of the disease. However, there are few official documents (explicitly) that specify the modifications that should be made in the care of a normal pregnancy in times of pandemic, leaving the adaptations in the hands of local governments and health centers, which has generated great heterogeneity in the monitoring of pregnancy in Cuba.

Justification

In Clinic-32 of the La Maya Health Area (Santiago de Cuba Province), there is a high incidence of iron deficiency anemia in pregnant women, with a high probability of abortion, fetal growth restriction, premature rupture of membranes, premature delivery, oligohydramnios and low birth weight; Therefore, it is necessary to carry out this investigation taking into account the consequences of the sociopolitical measures generated by COVID-19 in Cuba.

research question: ?How did the sociopolitical measures generated by COVID-19 influence the diagnosis of Iron Deficiency Anemia in pregnant women at Clinic-32, belonging to the Carlos Juan Finlay Teaching Polyclinic? General objective: To describe how the sociopolitical measures generated by COVID-19 influenced the diagnosis of iron deficiency anemia in pregnant women from Clinic-32, belonging to the Carlos Juan Finlay Teaching Polyclinic, between January 2021 and March 2022.

Method

A descriptive and non-interventional study was carried out in pregnant women diagnosed with iron deficiency anemia in Clinic-32 belonging to the Carlos J. Finlay Teaching Polyclinic; supported by the methods of participatory observation, medical interview, clinical laboratory and review of obstetric medical records; through a mixed research methodology, and under the paradigm of hermeneutics [41]. The current investigation is attached to the Declaration of Helsinki on research with human beings.

Universe and Sample

All the pregnant women (21) represented it from the Clinic-32 with a diagnosis of Iron Deficiency Anemia in the period from January 2021 to March 2022, who met the inclusion, exclusion and exit criteria.

Inclusion Criteria

Pregnant women diagnosed with iron deficiency anemia belonging to Clinic-32 during the period from January 2021 to March 2022

Who wish to participate in the study, signing the informed consent With complete obstetric clinical history.

Exclusion Criteria

Pregnant women who do not have iron deficiency anemia

Who do not wish to participate in the study

Incomplete clinical-obstetric history

Exit Criteria

Long-term emigration during the study period

Death

Who does not collaborate in the study

Analysis of the Results

The Table 1 shows the age groups studied, with the highest percentage between 20 and 34 years of age (85.7%), of which the most significant are those with the lowest educational level. Already in Table 2 the pregnant women with iron deficiency anemia and its severity are recorded, showing that the highest percentage is represented by 57.1%, presenting a slight anemia in their gestational process. Followed by moderate anemia in 42.9%. These results depend on many factors: such as accessibility to food products, gastrointestinal diseases and the purchasing power of the pregnant woman and her family. Table 3 shows the schooling of those studied, where 52.4% have finished high school; What is striking is that those who have finished university present the lowest percentage (9.5%), thus demonstrating the benefits of academic development in the general population.

Table 1: Pregnant women with iron deficiency anemia according to age. Clini-32. Carlos Juan Finlay Teaching Polyclinic, from January 2021 to March 2022.

Age groups	No	%
13 – 19	1	4.8
20 – 34	18	85.7
35 and more	2	9.5
Total	21	100

Source: Clinical History.

Table 2: Pregnant women with iron deficiency anemia according to type of anemia due to its severity. Clinic-32. Carlos Juan Finlay Teaching Polyclinic, from January 2021 to March 2022.

Type of anemia	No	%
light	12	57.1
moderate	9	42.9
Severe	0	0
Total	21	100

Source: Clinical History.

Table 3: Pregnant women with iron deficiency anemia according to school level. Clinic 32. Carlos Juan Finlay Teaching Polyclinic, from January 2021 to March 2022.

School grade	No	%
Primary	0	0
Secondary	8	38.1
pre-college	11	52.4
university	2	9.5
Total	21	100

Source: Clinical History, Medical interview.

Table 4 mentions pregnant women with iron deficiency anemia according to their employment relationship, corroborating that the highest percentage (52.4%) are housewives, followed by workers; These results are counterproductive, where in the idea to be defended it was expected that housewives would have a lower incidence, due to their longer stay at home, not presenting work stress and having access to their six food frequencies. Table 5 reflects the pregnant women with iron deficiency anemia and their accessibility to medical services, evidencing that 85.7% of them have regular access to services, and 14.3% classified as poor in accessibility to health services. Borrowed.

Table 4: Pregnant women with iron deficiency anemia according to employment relationship. Clinic-32. Carlos Juan Finlay Teaching Polyclinic, from January 2021 to March 2022.

Employment relationship	No	%
student	0	0
worker	10	47.6
homey	11	52.4
Total	21	100

Source: Clinical History, medical interview.

Table 5: Pregnant women with iron deficiency anemia according to accessibility to medical services. Clinic-32. Carlos Juan Finlay Teaching Polyclinic, from January 2021 to March 2022.

Accessibility type	No	%
Good	0	0
bad	3	14.3
Regular	18	85.7
Total	21	100

Source: medical interview, observation.

Table 6 shows the relationship between pregnant women with iron deficiency anemia and their socioeconomic conditions, where 90.5% present regular socioeconomic conditions; the results of this study were counterproductive with the idea to defend; this could be due to the high priorities given to them by pregnant women with regular socioeconomic conditions. The bidirectional relationship between purchasing power and the incidence of the

problem studied is confirmed.

Table 6: Pregnant women with iron deficiency anemia according to socioeconomic conditions. Clinic-32. Carlos Juan Finlay Teaching Polyclinic, from January 2021 to March 2022.

Socioeconomic conditions	No	%
good	0	0
Regular	19	90.5
bad	2	9.5
Total	21	100

Source: Clinical History, direct observation.

Relationship Between Sociopolitical Measures Implemented by Covid-19, Age, School Level, Employment Relationship, Accessibility to Medical Services, Socioeconomic Conditions and Type of Anemia.

In the investigation presented, it can be interpreted that the socio-political measures implemented by covid-19 in Cuba had a profound impact on pregnant women between the ages of 20 and 34 in Clinic-32 of the La Maya health area; The foregoing may respond to the high socialization of young Cuban women and as a consequence of social isolation, it was a barrier to solving their needs. Despite the fact that the sociopolitical measures implemented by covid-19 had an impact on the population studied, it was noteworthy that none of the pregnant women investigated at Clinic-32 presented severe anemia, this could be the favorable result of living in rural areas, where the acquisition of some foods avoided reaching this stage of anemia. In the school level, section of those studied related to the measures implemented by covid-19, it was counterproductive that the most affected were those who finished pre-university, when they should have been those with a primary or secondary education level, and this could be due to the idiosyncrasy of the territory where they live.

It was expected that those with a labor relationship would be the most affected by the sociopolitical measures; however, homemakers had a higher incidence in this section, which could be due to their economic dependence on their relatives, since this group was considered vulnerable and access to services was restricted during the covid-19 period. Your basic needs. The effects of the socio-political measures implemented by covid-19 on the accessibility to medical services in the La Maya health area were evidenced, given by the stoppage of public transport and the distance between where the pregnant woman lives and the health institution. Health. In the section socioeconomic conditions and sociopolitical measures implemented by covid-19, it was possible to verify that pregnant women with regular conditions were those grouped in the ages of 20 to 34 years of age, which could be influenced by the priorities that they took. .

Conclusions

It is evident a systematization of the object of study, to carry out community interventions in women of childbearing age to prevent anemia in pregnancy; in addition to preparing a scientific manual that guides health professionals in the management of pregnant women in times of pandemic.

Declaration of Interests

The authors declare that they have no conflicts of interest.

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